## REMARKS

Applicant would like to thank the Examiner for the interview over the telephone conducted on May 2, 2006. During the interview, representative of Applicant discussed claim 1 and the cited reference, Cideciyan (US 5,177,482) with the Examiner.

Claim 1 sets forth:

> evaluating one or more source characters to determine an *intermediate* running disparity for each of the one or more source characters; and
>
> determining a running disparity for each of the one or more source characters before encoding the one or more source characters based on a current running disparity associated with the one or more source characters and the intermediate running disparity of each of the one or more source characters.

(Claim 1; emphasis added)

The representative of Applicant respectfully submitted that claim 1 is patentably distinct from the encoding scheme in Cideciyan. Cideciyan discloses a state transition bit T and a coder state bit S. The next coder state bit S(N+1) is generated from an old coder state bit S(N) and an old state transition bit T(N) as follows:

$$S(N+1) = S(N) \; XOR \; T(N)$$

(Cideciyan, col. 7, ln. 39-41; col. 11, ln. 28-32 and 61-66; Figures 2 and 8).

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According to Cideciyan, T(N) is a function of the old data byte, DB(N) (Cideciyan, col. 7, ln. 39-41; Figure 2). Thus, S(N+1) is derived from S(N) and DB(N). The Examiner analogized S to be the running disparity in the current application, T to be the flip/hold bit in the current application, and DB to be the source character in the current application. Applying the Examiner's analogy, the running disparity S(N+1) of a source character DB(N+1) is derived from a current running disparity S(N) and a *current source character DB(N)* associated with S(N). However, this is contrary to claim 1, which sets forth determining a running disparity for each of the one or more source characters based on a current running disparity associated with the one or more source characters and the *intermediate running disparity* of each of the one or more source characters. The intermediate running disparity of each of the one or more source characters is determined by evaluating *the one or more source characters*. For example, as illustrated in Figure 7 of the current application, the running disparity RD 780 of Input4 (an example of source characters) is derived from the current running disparity from register D 740 and a corresponding intermediate running disparity ID 774, which is derived from Input 4 and ID 772, which is derived Input3 and ID 770, which is derived from Input 2 and Input 1.

Referring back to Cideciyan, the coder state bit, which was analogized to be the running disparity, is derived by:

$$S(N+1) = S(N) \; XOR \; T(N),$$

where $T(N) = f(D(N))$. Cideciyan fails to disclose an *intermediate* running disparity. However, the Examiner referred to column 11, lines 61-67 in Cideciyan and alleged that the passage disclosed the intermediate running disparity. It is respectfully submitted that the aforementioned passage merely discloses that $S(N+q) = S(N+q-1)$ XOR $T(N+q-1)$. Again, the coder state bit $S(N+q)$ is derived from a current coder state $S(N+q-1)$ and a current state transition bit $T(N+q-1)$. $S(N+q)$ is not based on any intermediate running disparity. Although $S(N+q)$ may be derived in advance per Cideciyan, it is not an "intermediate" coder state bit for the corresponding data byte $DB(N+q)$. Rather, $S(N+q)$ *is* the coder state bit of $DB(N+q)$.

Note that the Examiner analogized $T(N)$ to be the flip/hold (F/H) bit recited in some of the claims (e.g., claim 2) in the final Office Action (Final Office Action mailed 3/13/06, p. 2). As discussed above, the intermediate running disparity as claimed is a distinct parameter from the F/H bit. Therefore, to be consistent with the Examiner's analogy in the final Office Action, $T(N)$ cannot be the intermediate running disparity as claimed.

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## Conclusion

No agreement was reached between the Examiner and the representative of

Applicant during the interview. However, if the Examiner believes another

telephone conference would expedite or assist in the allowance of the present

application, the Examiner is invited to call C. Teresa Wong at (408) 720-8300.


Respectfully submitted,
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